

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): YELLIN, Daniel et al. EXAMINER: Not yet assigned
SERIAL NO.: Not yet assigned GROUP ART UNIT: Not yet assigned
FILED: Herewith Attorney Docket No.: P-2654-US1
FOR.: A CHANNEL ESTIMATOR

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, this Information Disclosure Statement includes:

1. ☐ Documents including patents, publications, and other information listed on the attached Form PTO-1449 for consideration by the Examiner;
2. ☒ Form PTO-1449 which lists documents including patents, publications and other information for consideration by the Examiner but in accordance with 37 C.F.R. 1.98(d) does not include those documents which have been previously cited or submitted to the Patent Office in the following prior application U.S. Serial No. 09/438,475, filed November 12, 1999 which is properly identified and relied on.
3. ☐ Other information for the Examiner's consideration which was cited in a communication from a foreign patent office in a counterpart foreign application.

The information herein cited is only in fulfillment of Applicant(s) duty of candor in disclosing all information brought to Applicant(s) attention. This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art". If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant(s) reserve the

right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant(s) further reserve(s) the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

In accordance with MPEP Sections 609 and 707.05(b), it is requested that each and every document cited (including any cited in applicant's specification which is not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on Form PTO-1449. Such initialing is requested even if the Examiner does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application and is evidence that the Examiner has considered the document.

This Information Disclosure Statement is being filed:

- I) ☒ Within three (3) months of filing the subject Application or entry of the subject Application into the national stage or before mailing of the first Office Action on the merits whichever event occurs last pursuant to of 37 C.F.R §1.97 (b); or
- II) ☐ After the period specified in (I) but before the mailing date of either a final Official Action under 37 C.F.R §1.113 or a notice of allowance under 37 C.F.R §1.311 whichever occurs first;

1. ☐ The undersigned hereby states that each item of information listed on the Form PTO-1449 was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement; or
2. ☐ the undersigned hereby authorizes the Patent Office to charge the fee in the amount of \$180.00 under 37 C.F.R §1.17 (p) to Deposit Account 05-0649.

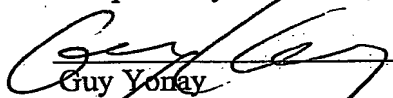
- III) ☐ After the period in (I) and (II) but before the payment of the issue fee,

1. The Undersigned hereby states:
 - a) ☐ that each item of information cited on the form PTO-1449 was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement; or

- b) ☐ that no items of information contained in Form PTO-1449 was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement; and
2. ☐ The Undersigned hereby authorizes the Patent Office to charge the Petition fee in the Amount of \$180.00 under 37 C.F.R. §1.17 (p) to Deposit Account 05-0649.

Except for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 05-0649.

Respectfully submitted,


Guy Yonay
Attorney for Applicant(s)
Registration No. 82,388

Dated: August 4, 2003

Eitan, Pearl, Latzer & Cohen Zedek, LLP.
10 Rockefeller Plaza, Suite 1001
New York, New York 10020
Tel: (212) 632-3480
Fax: (212) 632-3490

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not yet known
				Filing Date	Herewith
				First Named Inventor	YELLIN, Daniel
				Group Art Unit	Not yet known
				Examiner Name	Not yet known
				Attorney Docket Number	P-2654-US1
Sheet	1	of	3		

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Examiner Signature		Date Considered	
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***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

Substitut for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	Not yet known
		Filing Date	Herewith
		First Named Inventor	YELLIN, Daniel
		Group Art Unit	Not yet known
Examiner Name	Not yet known		
Attorney Docket Number	P-2654-US1		
Sheet	2	of	3

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AE	Schramm et al., "Pilot Symbol Assisted BPSK on Rayleigh Fading Channels with Diversity: Performance Analysis and Parameter Optimization", IEEE Transactions on Communications, Vol. 46. No. 12, December 1998, pp.1560-1563	<input type="checkbox"/>
	AF	Siala et al., "Maximum A Posteriori Multipath Fading Channel Estimation for CDMA Systems", Proceedings of Vehicular Technology Conference, Houston, Texas, May, 1999	<input type="checkbox"/>
	AG	3GPP RAN 25.214, v1.1.1,(1999-09) Physical Layer Procedures	<input type="checkbox"/>
	AH	Turkboylari et al., "An Efficient Algorithm for Estimating the Signal-to-Interference Ration in TDMA Cellular Systems", IEEE Transactions on Communications, Vol.46, No.6, June 1998, pp.728-731	<input type="checkbox"/>
	AI	Press et al., Numerical Recipes in C: The Art of Scientific Computing, 2nd Edition, Cambridge University Press, 1992	<input type="checkbox"/>
	AJ	Andoh et al., "Channel estimation Using Time Multiplexed Pilot Symbols for Coherent Rake Combining for DS-CDMA Mobile Radio", Proceedings of the IEEE Vehicular Technology Conference, 1997, pp. 954-958	<input type="checkbox"/>

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		First Named Inventor	YELLIN, Daniel		
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		Examiner Name	Not yet known		
Sheet	3	of	3	Attorney Docket Number	P-2654-US1

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AK	Adachi et al., "Wideband Wireless Access Based on DS-CDMA", IEEE Transactions on Communications, pp. 1305-1316, July 1998	<input type="checkbox"/>
	AL	Adachi et al., "Wideband DS-CDMA for Next-Generation Mobile Communications Systems", IEEE Communications Magazine, September 1998, pp.56-69	<input type="checkbox"/>
	AM	3GPP RAN TS 25.215, v0.0.1 (1999-09) Physical Layer - Measurements	<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

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